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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,279	11/26/2001	Phillip E. Mattison	42390P4577D	3204

7590

01/13/2004

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EXAMINER

LUU, THANH X

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/995,279	<b>Applicant(s)</b> MATTISON, PHILLIP E.	
	<b>Examiner</b> Thanh X Luu	<b>Art Unit</b> 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-24 and 30 is/are rejected.
- 7) ☒ Claim(s) 25-29 and 31-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                                                 |                                                                             |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>062003</u> | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 16-33 in the paper filed February 10, 2003 is acknowledged.

Claims 16-33 are currently pending.

***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16, 17 and 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ando et al. (U.S. Patent 4,839,729).

Regarding claims 16, 17, and 19-23, Ando et al. disclose (see Figures 2 and 3) a system and method comprising: an array of analog photocells (11); a first plurality of shift cells or storage locations (15), an output of each shift cell or storage location in the first plurality of shift cells or storage locations being coupled to an input of the next shift cell or storage location in the first plurality of shift cells or storage locations, each shift cell or storage location in the first plurality of shift cells or storage locations being coupled to a corresponding analog photocell in the array of analog photocells; a second

plurality of shift cells or storage locations (14), an output of each shift cell or storage location in the second plurality of shift cells or storage locations being coupled to an input of the next shift cell in the second plurality of shift cells or storage locations, each shift cell or storage location in the second plurality of shift cells or storage locations being coupled (see Figure 3) to a corresponding shift cell or storage location in the first plurality of shift cells or storage locations; and a differential operational amplifier (17) having at least two inputs, a first input being coupled to a terminating output of the first plurality of shift cells or storage locations and a second input being coupled to a terminating output of the second plurality of shift cells or storage locations. A key frame is transferred from the terminating output (to the differential amplifier) of the second plurality of shift cells or storage locations. Ando et al. also disclose (see Figures 2 and 3) the difference between signals obtained from the terminating output of the first plurality of storage locations and the terminating output of the second plurality of storage locations represents delta frame (difference) of an image captured by the array of analog photocells.

5. Claims 24 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by the USSR publication of Veto et al. (SU 740085, published July 30, 1994).

Regarding claims 24 and 30, Veto et al. disclose (see the Figure and translated abstract) a system and method comprising: an array of analog photocells (1); a first plurality of shift cells or storage locations (2), an output of each shift cell or storage location in the first plurality of shift cells or storage locations being coupled to an input of the next shift cell in the first plurality of shift cells, each of the photocells in the array of

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analog photocells being coupled to a corresponding shift cell in the of the first plurality of shift cells; a second plurality of shift cells or storage locations (6), an output of each shift cell or storage location in the second plurality of shift cells or storage locations being coupled to an input of the next shift cell in the second plurality of shift cells, a signal from a terminating output (at 4) of the first plurality of shift cells being transferred to an input of a first shift cell in the second plurality of shift cells; and a differential operational amplifier (8) having at least two inputs, a first input of the differential operational amplifier being coupled to the terminating output of the first plurality of shift cells and a second input being coupled to a terminating output (at 7) of the second plurality of shift cells.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al.

Regarding claim 18, Ando et al. disclose the claimed invention as set forth above. Ando et al. do not specifically disclose the key frame is transferred after the system is first initiated. However, it is well known to transfer signals after a system has had time to initialize. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to transfer the key frame after the system is first

initiated in the apparatus of Ando et al. to allow for the signals to be readout and properly obtain a reference signal.

***Allowable Subject Matter***

8. Claims 25-29 and 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: a system and method as claimed, more specifically in combination with a regeneration amplifier having an input coupled to the terminating output of the first plurality of shift cells or storage locations and having an output coupled to the input of the first shift cell of the second plurality of shifts cells or storage locations, is not disclosed or made obvious by the prior art of record.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

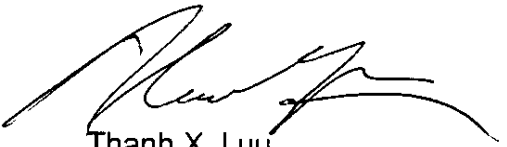
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (703) 308-4852. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl  
September 9, 2003



Thanh X. Luu  
Patent Examiner